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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,912	12/28/2000	Malcolm M Smith	062891.0443	9607

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EXAMINER
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JAGANNATHAN, MELANIE

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 05/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/752,912

Applicant(s)

MALCOLM M. SMITH

Examiner

Melanie Jagannathan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 8, 14, and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amended limitation of requesting subscription information from the home agent in advance of mobile unit roaming into foreign network associated with a foreign agent is not disclosed in specification in a manner such that one skilled in the art could arrive at claimed limitation without undue experimentation. Specification of instant application discloses base station of foreign network using device identifier of mobile unit, acquired by detection of mobile unit in foreign network, to determine IP address of mobile unit and IP address of home agent in order for base station to initiate registration of foreign agent to receive redirect packets from home agent. This is done by base station communicating IP addresses of home agent and mobile unit to foreign agent which subsequently uses this information to request establishment of tunnel. Home agent then registers foreign agent. Specification of instant application then immediately discloses that because foreign agents may register with home agent at any time, home agent and foreign agent may establish tunnel in advance of mobile unit roaming into foreign network thus

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supporting a virtually seamless handoff of mobile unit into foreign network. See pages 9-11 of specification. In the method disclosed in above identified independent claims, base station receives device identifier of mobile unit and, as disclosed in specification, this is done by base station detecting presence of mobile unit in network. Examiner respectfully points out this subsequently discloses mobile unit has roamed into foreign network. Applicant has argued that reference Frid et al. does not disclose amended limitation of requesting subscription information from the home agent in advance of mobile unit roaming into foreign network associated with a foreign agent because reference discloses mobile station has realized it has traveled into new geographic area (column 4, ll. 32-36). Examiner contends Frid et al. teaches method of said claims as it discloses base station receiving mobile identification number, identifying home agent and IP address of mobile unit in order to set up tunnel between home and foreign agents before a data communication session for mobile unit has been started just as disclosed by specification of instant application.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Frid et al. US 6,137,791.

Regarding claims 1-2, 7-9, 14-15, 20, 26-27, the claimed receiving of device identifier from a mobile unit is disclosed by mobile station (Figure 1, element 20) transmitting mobile identification number to base station (element 30). The claimed determining a home agent for mobile unit based on device identifier is disclosed by base station forwarding MIN to visited mobile switching center (element 4) serving that area and using MIN identifies home agent and HLR (element 50) associated with mobile station (element 20) at home network. See columns 1-4 and column 7, lines 40-45. The claimed requesting subscription information from home agent, wherein subscription information comprises an IP address for mobile unit is disclosed by VMSC transmitting location update signal to HLR where HLR has stored data correlating the received MIN with a corresponding IP address assigned to mobile station, HLR providing subscriber data back to VMSC. See column 6, lines 53-62, column 7, and lines 34-45. The claimed initiating registration of foreign agent with home agent, wherein the registration permits foreign agent to receive redirect packets from home agent is disclosed by GPMSC (element 70) establishing IP tunnel (element 90) with VPMSC. See column 4, lines 14-67, column 5, lines 1-37, column 9, and lines 22-37.

Regarding claims 3, 16, the claimed IP address of mobile unit specifying network identifier identical to that specified by an IP address of home agent is disclosed by within PMM network, mobile unit assigned PMM network dependent IP address. See column 5, lines 3-4.

Regarding claims 4, 10, 17, 28, the claimed registration comprising a registration request to home agent including IP address of mobile unit and IP address of foreign agent is disclosed by GPMSC establishing tunnel through use of HLR (element 50) sending it routing instructions

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including IP address representing VPMSC and HLR retains information about current location of mobile station and correlating of MIN to mobile IP address.

Regarding claims 5, 11-12, 18, 29, the claimed redirect packets addressed to IP address of foreign agent and each redirect packet comprises as a payload a data packet addressed to IP address of mobile unit is disclosed by GPMSC encapsulating IP packet data addressed to mobile station within another IP packet addressed to VPMSC. See column 5, lines 24-27.

Regarding claims 6, 13, 19, 30, the claimed receiving redirect packets, extracting data packets from redirect packets and communicating data packets to mobile unit is disclosed by VPMSC extracting encapsulated original IP packet and identifies mobile station and forwarding extracted IP packet data to VMSC and delivered to mobile station. See column 5, lines 28-37.

### ***Response to Arguments***

5. Applicant's arguments filed 3/23/2004 have been fully considered but they are not persuasive. Applicant argues Applicant has argued that reference Frid et al. does not disclose amended limitation of requesting subscription information from the home agent in advance of mobile unit roaming into foreign network associated with a foreign agent because reference discloses mobile station has realized it has traveled into new geographic area (column 4, ll. 32-36). Examiner contends Frid et al. teaches method of said claims as it discloses base station receiving mobile identification number, identifying home agent and IP address of mobile unit in order to set up tunnel between home and foreign agents before a data communication session for mobile unit has been started just as disclosed by specification of instant application. Please see

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U.S.C. 112, 1<sup>st</sup> paragraph rejection above. Examiner respectfully maintains rejection with use of reference Frid et al.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 703-305-8078. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Melanie Jagannathan  
Patent Examiner  
AU 2666

MJ



  
FRANCK DUONG